

THE iMETOS iSCOUT® Color Trap: Slideshow

You can create a time-lapse from pictures taken by iMETOS iSCOUT® ColorTrap device to see how your crop was growing and developing from seeding to harvesting. For more details see help in slideshow section on ng.fieldclimate.com.



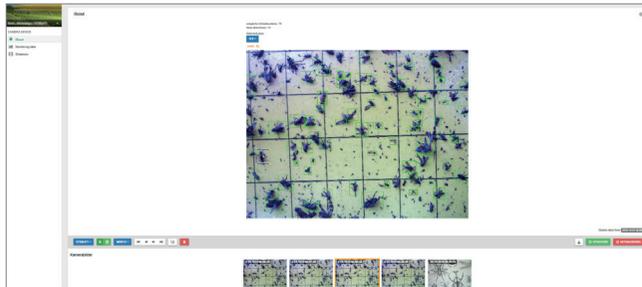
INSECT DETECTION TOOL

Insect detection tool **automatically detects** and counts all insects marked with rectangles. **Thicker rectangles** mark the **new insects** the system detected, based on the previous image.

You can **edit** the drawn **rectangles** on the image – change size, remove or add new rectangles.

Select the rectangle and **label/mark the insect** accordingly.

Remember to save at the end. You can also **export** the image.



On **STATION SETTINGS** page set up your iMETOS device.

Station settings > Configuration: Ensure that Time zone and location are properly set. You need to set them up manually, for the station to take and send photos at the time in your time zone. Under Transfer settings, you can define how your iMETOS device sends data. Note that the settings for logging interval and transmission times will work with the default values as long it is not changed.

Setup how your iMETOS iSCOUT Color Trap® sends the data. Note that taking and sending pictures consumes a lot of data and energy, which is why a limitation of three pictures per day is set.

Under **Camera**, you can setup camera settings. Note that wrong settings can result in corrupted images. Change these settings only if you are an expert.

Visit metos.at/fieldclimate-manual for more information.

MAINTAINING THE iMETOS iSCOUT® Color Trap

Replace the sticky plate when it is full. The frequency depends on the pest pressure.

When the solar panel of the iMETOS device is exposed to the sun and gets enough sunlight it should constantly recharge the battery of the system. The lifespan of the battery is expected to be 5 to 6 years with sufficient recharging from the solar panel. Deep discharge shortens its lifetime. The iMETOS will prevent this to happen and protect the battery by limiting the data transfer to the safe level of charge. In doing so, data is not lost and battery recovers faster. Please make sure to clean the solar panel if it is dirty or covered with snow or some other material.

Note: When the season is over, remove the device from the field, disconnect the solar panel and the battery to avoid discharge and store it indoors until the next season.

UPDATING YOUR iMETOS iSCOUT® Color Trap

Every time the iMETOS iSCOUT® Color Trap connects to FieldClimate, it checks for the latest firmware version. If it finds a newer version, it automatically downloads it and updates itself. iMETOS iSCOUT® Color Trap can also be updated manually via the USB connection.



iMETOS iSCOUT Color Trap

USER MANUAL

Version 1.0, 12-2018



Thank you for choosing Pessl Instruments GmbH iMETOS iSCOUT® Color Trap for Remote Trap Image Monitoring. iMETOS iSCOUT® Color Trap periodically takes high resolution photos of the insect trap. Photos are automatically uploaded to the FieldClimate platform without the need of any user intervention, thus allowing a continuous insect control in the agricultural sector. Device comes with a high-resolution camera and a holder for a sticky plate.

Catching various insects depending on the color of sticky plate used:

- **blue:** Frankliniella occidentalis, thrips tabaci
- **yellow:** white flies, leafminers, sciarid flies
- **white:** apple sawfly, plum sawfly, plum fruit sawfly, raspberry beetle

iMETOS iSCOUT® Color Trap features:

- 12 Megapixel resolution images.
- Embedded GPS location.
- Easy installation.
- Self-sufficient, as it is powered by a solar panel and a battery.
- Firmware upgrade “over the air”.
- Cloud Data Storage.
- Time series of pictures stored for further analysis.
- Automatic counting of captured objects.
- Personalized web interface.

Pessl Instruments GmbH
Werksweg 107, 8160 Weiz, Austria
office@metos.at
+43 317 255 21



For full user manual please visit:
metos.at/imetos-iscout-series



Visit metos.at/terms-of-use/ to view legal information for Pessl Instruments products and services.

YOUR iMETOS iSCOUT® Color Trap

The iMETOS iSCOUT® Color Trap device consists of two parts: main unit and control unit.

Main unit:

- A metal plate
- the motherboard (PCB) containing the processor, modem, SIM card holder, USB port, antenna and cameras with its optics.

Control unit:

- a stainless-steel holder
- a plastic waterproof box with PCB (PCB controls the main unit when to start/stop)
- power supply (battery and solar panel) is mounted and connected to the control unit

Other parts:

- Consumables: sticky paper or insect glue
- Unique serial number
- Sticker with keys that enable the access to the *FieldClimate* platform

On pictures:

iMETOS iSCOUT® Color Trap



1. Control unit; 2. Power supply (solar panel and battery); 3. Logger and modem;
4. Camera; 5. Trap

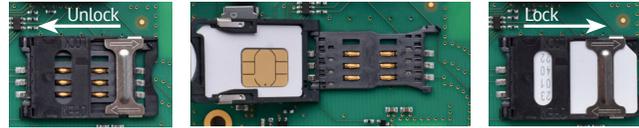
START-UP THE iMETOS iSCOUT® COLOR TRAP

iMETOS iSCOUT® Color Trap is operational in all areas covered at least by **UMTS (3G)** network (it will not work on 2G/GPRS services).

In GPRS, UMTS and LTE networks a SIM card from a provider is needed. In CDMA network, you do not need a SIM card.

Note: Check that the PIN request for the SIM is disabled and that you have data transfer service enabled.

To insert a SIM card:



1. Slide the metal part of the SIM card holder to unlock it.
2. Place the SIM card into the holder so the gold contacts on the SIM face down on the board.
3. Lock the holder by sliding the metal lock.



4. Connect the red cable to the positive battery terminal.

Every picture file has 10±2MB (depending in the complexity of the image) so the data plan in your SIM should be calculated according the following formula:

$$\text{Monthly data plan} = 12 \text{ (MB per picture)} * \text{number of cameras} * \text{shootings per day} * 30 \text{ (days per month)} = 12 * 2 * 2 * 30 = 1,5 \text{ GB/month}$$

Your device is now up and running. In case you need further support, please visit metos.at/imetos-iscout-series or contact support@metos.at.

INSTALLING YOUR iMETOS iSCOUT® Color Trap

The iMETOS iSCOUT® Color Trap has to be mounted on the pole. Make sure that the pole is as vertical as possible. Control unit should be mounted above the canopy facing south, for the solar panel to receive sufficient sunlight to charge the battery.

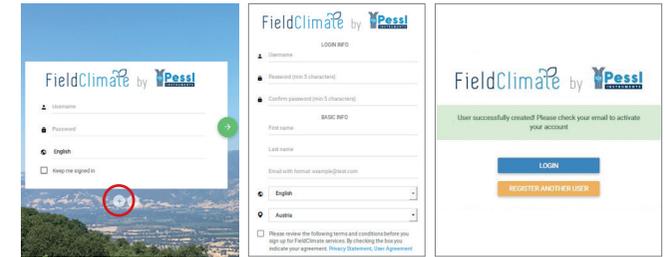
The main unit with the sticky plate trap has to be positioned on the pole. When a sticky plate is full of bugs, replace it with a new one. Take the metal plate and peel off one side of the sticky plate. Align the sticky paper with the edges of the metal plate and press it down.

iMETOS iSCOUT® Color Trap devices are already focused to the exact distance between the camera and the sticky plate inside the trap. Additional focusing of your device is not necessary. After you insert a SIM card and connect the battery, your device is ready to use.

USE YOUR iMETOS

First you need to register on the *FieldClimate* platform, which gives you access to the photos taken by the camera and to the data in charts or tables. *FieldClimate* also provides a powerful decision support system for growing your crops (plant protection, irrigation, sowing, harvesting, fertilizing).

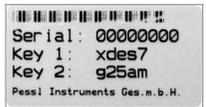
REGISTER AS A NEW USER ON ng.FieldClimate.com



1. Go to ng.fieldclimate.com/
2. Insert your personal login and click the button data & e-mail "+".
3. Check your e-mail and click on the link to activate the user account you created.

ADD YOUR iMETOS DEVICE TO YOUR ACCOUNT

Now you can login to ng.FieldClimate.com. To add your iMETOS device, click on the icon in the top right corner **User Menu > Add/Remove station**. It will ask you for the Station Serial number (SN) and the station key. Now the silver sticker (in the figure) which came with your iMETOS has to be used. Key 1 gives you full (admin) access and enables you to change all the settings and set up the iMETOS (e.g. data transfer interval, SMS warning, etc.). With Key 2 the user is not allowed to change the station parameters, but can access all the data.



Add Station ✕

Use the Station ID and key that came with your iMetos station to add it to your list. Use key 1 if you want to be able to change station configuration settings or key 2 if you want read-only access.

Station id:

Station key:

ADD STATION
DELETE STATION

THE iMETOS iSCOUT® Color Trap: STATION DATA AND SETTINGS

You can browse through all stations by clicking the icon Station List in top right corner.

Click on the station name to select it.

Access the iMETOS iSCOUT® Color Trap page by clicking the Eye icon on the left side of the bar.

To choose which picture you want to see in full-size, use the date selection tool at the bottom of the page. Hover over the picture with a mouse and use the mouse wheel to zoom in and out.